

Chapter 8 Photosynthesis

Section Review 8-2

Reviewing Key Concepts

Matching Match each scientist with the appropriate experiment or conclusion. Write the letter of the correct scientist on the line provided. A letter may be used more than once.

- a. Priestley b. van Helmont c. Ingenhousz

- _____ 1. Plants need sunlight to produce oxygen.
 _____ 2. Plants gain most of their mass by taking in water.
 _____ 3. Using a candle and a jar, he observed that plants produce a substance that kept the candle burning.
 _____ 4. He measured the mass of the soil in which a plant grew.
 _____ 5. He observed plants exposed to light.

Short Answer On the lines provided, answer the following questions.

6. What is the overall equation for photosynthesis?

7. Explain how light energy affects a chlorophyll molecule.

Reviewing Key Skills

8. **Predicting** If a plant is kept under green-colored light for an extended period of time, what will happen to the plant's food production?

9. **Inferring** A plant that has a high amount of the orange pigment carotene would have leaves of what color? Explain your answer.

10. **Design an Experiment** Design an experiment to test the effects of air pollution on plants. Be sure to include a control.

